

PATENT COOPERATION TREATY



From the INTERNATIONAL BUREAU

PCT**COMMUNICATION IN CASES FOR WHICH
NO OTHER FORM IS APPLICABLE**

To:

OKADA, Kazuhide
Chiyoda Bldg. Kitakan, 13-38, Naniwa-cho,
Kita-ku, Osaka-shi, Osaka
5300022
JAPON

Date of mailing (day/month/year) 27 March 2006 (27.03.2006)	
Applicant's or agent's file reference P037185-P0	REPLY DUE see paragraph 1 below
International application No. PCT/JP2005/000069	International filing date (day/month/year) 06 January 2005 (06.01.2005)
Applicant MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.	

1. ☐ REPLY DUE within _____ months/days from the above date of mailing
☐ NO REPLY DUE, however, see below
☒ IMPORTANT COMMUNICATION
☐ INFORMATION ONLY

2. COMMUNICATION:

The International Bureau acknowledges receipt, on 27 February 2006 (27.02.06), of the applicant's informal comments on the written opinion of the International Searching Authority (Form PCT/ISA/237).

Please be informed that unless an international preliminary report on patentability (Chapter II of the PCT) (Form PCT/IPEA/409) has been or is to be established, the International Bureau will communicate a copy of the submitted comments together with a copy of the international preliminary report on patentability (Chapter I of the PCT) (Form PCT/IB/373) to each designated Office in accordance with Rule 93bis.1 but not before the expiration of 30 months from the priority date.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Akiko KOYAMA (Fax 338 7010)
Facsimile No. (41-22) 338.70.10	Telephone No. (41-22) 338.80.23

BEST AVAILABLE COPY

10/585643
IAP6 Rec'd PCT/PTO 07 JUL 2006

PCT/JP2005/000069

Date 22.02.06

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Informal Comments

Re: International Application No. PCT/JP2005/000069
Applicant: MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.
International Filing Date: 06.01.2005
Agent OKADA KAZUhide
Chiyoda Bldg. Kitakan, 13-38, Naniwa-cho,
Kita-ku, Osaka-shi, Osaka
5300022
Japan
Agent's file reference 100086737

Dear Sir.

The applicant, who received a Written Opinion of the International Searching Authority relating to the above-identified International Application transmitted on 12.04.2005, hereby submits an Informal Comments.

Very truly yours

Okada Kazuhide

Okada Kazuhide

Attachment:

Informal Comments

1 sheet

Informal Comments

We note that the Written Opinion of the International Search Authority (WO/ISA) prepared for the present PCT application recently presented an opinion that the invention of the application has no inventive step in view of the cited document 1 (JP2000-99408A).

In response, the applicant of the invention of the application files informal comments and presents the following opinion to the above-mentioned written opinion.

In the cited document 1, a prevailing memory block alternative-processing method in nonvolatile semiconductor recording media is shown. However, when the method according to the cited document 1 is implemented in large-capacity memory cards of recent years, the number of memory blocks becomes enormous. Accordingly, in the event that the search processing (processing 501 of Fig. 5) stipulated in the paragraph [0022] is executed, the time required for the processing increases in proportion to the number of memory blocks. Consequently, in the case of the cited document 1, there occurs inconvenience in that as the capacity of the memory card increases, the recording speed of the memory card decreases. As clear from the foregoing, it cannot be said that the cited document 1 is suited for large-capacity memory cards of recent years.

In order to process memory blocks, growing enormous in number due to its large capacity, alternatively in a short time, a typical memory card of recent years is configured to process the memory blocks by dividing the memory blocks into a plurality of block groups in advance, and then performing alternative-processing to the memory blocks for each group. The invention of the application is intended for memory cards of this kind, in which the memory blocks are divided into groups and are processed alternatively within the groups. The present

invention relates to the logical format of the memory cards that are configured as such.

In the memory card in which memory blocks are divided into groups, there is an inconvenience in which the groups having
5 information with high renewal frequency outlive their usefulness faster than other groups, resulting in life difference between the memory blocks.

It is the object of the invention of the application to remove this kind of inconvenience, and by providing the
10 configuration specific to the invention of the application in the logical format of recording media, the life difference between memory blocks is reduced. In particular, by providing a configuration to achieve a condition in which the data is
15 erased from the end of the partition management information area to the head of the partition area, this region is allowed to be used for alternative-processing, and this improves the logical format of a recording medium so that the file system control information with high renewal frequency is grouped with the physically erased region.

20 Furthermore, in the FAT file system which is popularly adopted for many memory cards, there is no degree of freedom in arrangement of file control information from the viewpoint of format regulations, and file information with high renewal frequency such as the FAT table, etc. tends to be arranged in
25 the vicinity of the head of the partition region. The invention of the application exhibits particularly pronounced effects in this kind of actual file system.

As clear from the foregoing, the invention of the application apparently differs from the cited document in the
30 memory card alternative-processing method. In addition, the cited document 1 relates to the alternative-processing of memory cards, whereas the invention of the application relates to the improvement of logical format in memory cards capable

of carrying out the alternative-processing, and the configurations of these are apparently different.

Furthermore, the Examiner mentions that "as a method for configuring an alternative page region, securing the condition with the data physically erased from the end of the partition management information area to the head of the partition area is merely a matter of design choice which can be suitably selected by a person skilled in the art". However, it is apparent from the foregoing description that in the file system to which the invention of the application is intended to apply, the configuration characterized by the invention of the application is not a mere matter of design choice but contains sufficient inventive steps. In addition, the cited document 1 is intended for a file system that is one generation older than the invention of the application, and it is apparent that the inventive steps of the invention of the application should not be evaluated on the basis of the cited document 1 which is the conventional and existing technique.

As described above, the present invention completely differs from the cited document 1 in the constitution and the effects. In addition, even those skilled in the art could not have conceived the present invention. It is clear that the present invention does not fall within the scope of a mere matter of design choice, nor of a common measure.

End